

submitted that no new matter has been introduced by the present amendments and entry of the same is respectfully requested.

Applicants respectfully request reconsideration of the pending rejections and reexamination of the present claim in light of the amendments and the remarks detailed below.

***Non-statutory Double Patenting***

The examiner has maintained the provisional obviousness-type double patenting rejection of claim 5-8, 10-22 over claims 1-17, 24-43, and 50-69 of copending Application Ser. No. 09/285,658. Applicants respectfully traverse this rejection. Without acquiescing to the rejections, and because rejections are provisional, Applicants respectfully request that the rejections be held in abeyance until a patent may be issued from copending application 09/285,658. At that time Applicants will consider filing a terminal disclaimer.

***Obviousness rejection under 35 U.S.C. 103(a)- Sooknanan et al in view of Van Gelder et al.***

The Examiner rejected Claims 1, 3-13, 25-26 under 35 U.S.C. 103 (a) over Sooknanan et al. (WO96.17076) in view of Van Gelder et al. (5,545,522).

The method of Sooknanan et al. is “a method for amplifying a specific nucleic acid sequence as a relative constant temperature and without the serial addition of reagents”. Applicants have amended claim 1 to clarify that the buffers added at sequential steps are different. Amended claim 1 provides a method for the amplification of a

population of nucleic acids with serial addition of different reagents. The method of claim 1 is performed in four steps with sequential addition of first, second and third buffers that are different from one another to a single reaction vessel. Sooknanan et al. does not disclose the limitation of serial additions of different buffers as required by amended claim 1. The sequential addition of different buffers allows for a change of buffer conditions at each step which allows for optimization of conditions for the enzymes being added at each step without the use of multiple tubes.

Van Gelder et al. does not remedy the deficiencies of Sooknanan et al. Like Sooknanan et al., Van Gelder et al. fails to teach the addition of different buffers to a single reaction tube at different steps during the amplification.

For the reasons listed above Sooknanan et al. fails to teach all the limitations of amended claim 1 and the dependent claims 3-13 and 25-26 and Van Gelder et al. does not remedy the deficiencies of Sooknanan et al.

***Obviousness rejection under 35 U.S.C. 103(a)- Sooknanan et al in view of Van Gelder et al. and further in view of Schnipelsky et al. (5,229,297)***

Claims 20-21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Sooknanan et al. (WO96.17076) in view of Van Gelder et al. (5,545,522) as applied to claims 1 and 3-13 above, and further in view of Schnipelsky et al. (5,229,297).

For the reasons indicated above, Sooknanan *et al.* and Van Gelder *et al.* in combination fail to teach all of the limitations of amended claim 1 and Schnipelsky *et al.* fails to remedy the deficiencies of Sooknanan *et al.* and Van Gelder *et al.* as applied to

dependent claims 20-21. Schnipelsky *et al.* does not teach serial addition of different buffers resulting in a change of buffer conditions between steps.

For these reasons and the reasons set forth *supra*, Applicants respectfully request that the rejection of claims 20-21 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

### CONCLUSION

For these reasons, Applicants believe all pending claims are now in condition for allowance and should be passed to issue. If the Examiner feels that a telephone conference would in any way expedite the prosecution of the application, please do not hesitate to call the undersigned at (408) 731-5768.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account 01-0431.

Respectfully submitted,



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**VERSION WITH MARKINGS TO SHOW CHANGES  
MADE TO THE CLAIMS**

*In the Claims*

Please amend Claim 1 as follows:

1. (thrice amended) 1. A method for the amplification of a population of nucleic acids comprising a population of poly(A)+ RNA, said method comprising:

a first step of mixing said population of nucleic acids with a primer comprising oligo-dT in a single reaction vessel under conditions that allow hybridization of said primer with said population of poly(A)+ RNA;

a second step of synthesizing a single-stranded DNA population from said population of poly(A)+ RNA wherein a reverse transcriptase, dNTPs and a first buffer are added to the single reaction vessel to synthesize said single-stranded DNA population;

a third step of synthesizing a population of double-stranded DNA from said single-stranded DNA population wherein a second buffer, different from said first buffer, and a four enzyme-mix comprising a DNA polymerase are added to said single reaction vessel to synthesize said double-stranded cDNA; and

a fourth step of synthesizing multiple copies of RNA from said double-stranded DNA population, wherein an RNA polymerase and a third buffer, different from said first and second buffers, are added to said single reaction vessel to synthesize said multiple copies of RNA.